

DIVISION 6 – CARPENTRY

Section 06170: Parallel Strand Structural Timber

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PART 1 –GENERAL

1.01 SUMMARY

- A. Section Includes: Parallel Strand (PSL) framing members.

1.02 REFERENCES

- A. ASTM D2559 Standard Specification for Adhesives for Structural Laminated Wood Products for Use Under Exterior (Wet Use) Exposure Conditions.
- B. ASTM D5456 Specification for Evaluation of Structural Composite Lumber Products.
- C. National Design Specification for Wood Construction (NDS).
- D. Materials shall comply with NES Report #NER-481 or CCMC Report #11161-R

1.03 SUBMITTALS

- A. Manufacturer's Product and Material Safety Data Sheets, for all specified products.
- B. Shop Drawings: Submit data showing product components, including finish.
- C. Wood Treatment Certificate signed by wood treatment agency certifying that treatment complies with specified requirements.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer experienced in PSL production, and capable of providing field service representation during construction.

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1.05 DELIVERY, STORAGE & HANDLING

- A. Storage and Protection: Store materials protected from exposure to harmful weather conditions and at temperature and humidity conditions recommended by manufacturer.

PART 2 –PRODUCTS

2.01 ENGINEERED PARALLEL STRAND STRUCTURAL UNITS

- A. Basis for Design: Trus Joist MacMillan Parallam PSL Heavy Timber.
- B. Douglas Fir, Larch or Hemlock, touch sanded, $E = 2.0E6$ psi, $F_b = 2900$ psi; sizes, shapes and profiles as indicated in Contract Documents.
- C. Grade Stamps: All Parallam PSL materials shall comply with NES Report No. NER-481 or CCMC Report No. 11161-R.
- D. Pressure-treat with ACQ or K-8™ preservative to a retention level to meet AWWA standards UC3A or UC3B, then kiln dry to an average moisture content of 15%.

2.02 MATERIALS

- A. PSL shall be manufactured in a continuous process from wood fiber with all strands oriented to the length of the member and then fed into a press. All members are to be free of finger or scarf joints.
- B. Adhesives shall be of waterproof type conforming to the requirements of ASTM D2559.

2.03 FABRICATION

- A. PSL shall be manufactured in a plant listed in the above referenced reports under the supervision of an approved third-party inspection agency. It shall be manufactured in a continuous process with all grain parallel with the length of the members.

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PART 3 –EXECUTION

3.01 MANUFACTURER’S INSTRUCTIONS

- A. Compliance: Comply with manufacturer’s product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.

3.02 ERECTION AND INSTALLATION

- A. Install per the Contract Documents and manufacturer’s recommendations. Holes, cuts or notches not shown on the contract documents shall not be permitted.
- B. Repair and field treat all cut, drilled and damaged surfaces per AWWA C2

3.03 CLEANING AND REPAIR

- A. Repair or replace damaged installed products. Remove construction debris from project site and legally dispose of debris.

END OF SECTION 06170